Valvata tricarinata Say.

Valvata tricarinata var. confusa Walker.

Valvata bicarinata Lea.

Vulvata bicarinata var. normalis Walker.

A quantitative study of the *Valvatas* collected is very interesting. 275 specimens were collected, of which 117 were typical *tricarinata*, 104 *bicarinata* var. *normalis*, 31 *tricarinata* var. *confusa*, 21 *bicarinata*, 1 specimen was 4-carinate and 1 specimen of *bicarinata* was almost ecarinate.

The most common forms of the carinate Valvatas would seem to be tricarinata and bicarinata var. normalis; typical bicarinata seeming the rarest.

Amnicola limosa Say. Common.

Amnicola walkeri Pilsbry. A single specimen of this very distinct species was found, but a careful search of the lake would probably reveal a number of specimens. It is one of the most characteristic of the fresh-water mollusks.

Planorbis campanulatus Say. Very common.

Planorbis bicarinatus Say. Common.

Planorbis exacutus Say. Apparently rare, as only two specimens were found.

Planorbis parvus Say. Very common.

Limnæa caperata Say. Fairly common.

Limnæa humilis Say. Not common.

Physa heterostropha Say. Not common.

Physa gyrina Say. Not common.

Succineu retusa Lea. Common.

A NEW FLORIDIAN AMNICOLA.

BY H. A. PILSBRY.

Amnicola augustina n. sp.

Shell narrowly umbilicate, brown or olive-brown, smooth, ovate-conic; spire convexly conic, the apex rather obtuse. Whorls $4\frac{3}{4}$, quite convex, separated by deeply-impressed sutures. Aperture about half as long as the shell, broadly ovate, obtusely angular above; peristome acute, continuous, dark-edged, adnate to the preceding

whorl for a short distance above. Operculum as usual in the genus. Length 3.2, diam. 2.2, longest axis of aperture 1.6 mm.

A small stream near St. Augustine, Florida. Types no. 58088, A. N. S. P., collected by Charles W. Johnson.

This species is larger than A. floridana Ffld., with a longer spire and more obtuse apex. It was collected in some quantity by Mr. Johnson many years ago. It was at first identified as Bythinella tenuipes Couper, and so recorded in Nautilus iii, p. 137; but further investigation has shown that it belongs to a different group of species.

NOTES ON THE NOMENCLATURE OF THE PUPACEA AND ASSOCIATED FORMS.

BY W. H. DALL.

The publication of Mr. Woodward's list of British land shells and certain work on which I have been engaged, have recently drawn my attention to this subject, which I have found so involved and so imperfectly represented in many publications on the group as to lead me to a tolerably thorough investigation, some of the results of which are here expressed.

I take it as axiomatic that (1) the type of a group must be one of the species mentioned when the name of the group was first published; (2) that in consolidating several old genera one of the old names and not a new one must be employed for the consolidated group; (3) that when a heterogeneous group is subdivided, its name must be retained for one of the resulting subdivisions; and (4) that we are under no obligation to accept the first species of a list as the type of a group for which no type has been selected by the original author, but that we should accept the decision of the first subsequent author who undertakes to select types from the original list in revising it.

In the following notes only the question of nomenclature is considered, the validity of the sections is left to the specialist in this difficult group. In matters of specific synonymy, I have depended on L. Pfeiffer, Pilsbry and Sterki.

Isthmia Gray, 1821. The sole example cited is Vertigo pygmæa Drap., which must be regarded as the type. Staurodon Lowe, 1852, and Dexiogyra Stabile, 1864, are synonymous.